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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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12/12/2003

Atsushi Shinozaki

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NATH & ASSOCIATES

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EXAMINER

ZHAO, DAQUAN

ART UNIT

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2621

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/733,517	Applicant(s) SHINOZAKI ET AL.	
	Examiner Daquan Zhao	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/18/2005;2/12/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawakami et al (US 5,867,626).

Regarding claim 1, Kawakami et al teach a recording and reproducing device (e.g. figures 1 and 2, column 2, lines 29-36) comprising:

an extracting unit for extracting audio data and video data in DIF blocks from an incoming DIF stream (e.g. Kawakami et al teach outputted data to a digital VCR from another digital VCR via the digital interface(DIF), wherein the transmitting data stream in the DIF has a serial data structure shown in figure 12, column 15, lines 13-18; the receiving VCR circuit shown in figure 3 has separate video input 301 and audio input 302. Therefore, the video and audio data would have obvious to one ordinary skill in the art to be extracted (or separated) from the incoming DIF stream for data processing in the video input 301 and audio input 302, also see column 9, lines 27-57);

a data reconstruction unit for extracting system data in DIF blocks from said DIF stream, extracting audio auxiliary data and reconstructing system data from the extracted data, as reconstructed system data (e.g. column 13, lines 9-53, the Header DIF Block generator 1040 generates the header for the video, audio and subcode block base on the ID: AP1, AP2, and AP3 in the transmitting VCR, and column 15, lines 29-39 teaches the reconstruction of the video, audio and subcode data in the receiving VCR is base on APT, AP1, AP2 and AP3 in the header DIF block and figure 17; column 15, line 40- column 16, line 65, teaches a PACK Correction Circuit 902, also see 902 in figure 9, wherein the PACK Correction Circuit 902 extracts the video and audio PACK header 801 shown in figure 8; PACK 1, which is the audio pack header, includes the number of audio channels and the audio signal sampling frequency. Thus, the Header DIF block corresponds to the reconstructing system data and the AAUX data corresponds to the audio auxiliary data);

a recording and reproducing unit for recoding and reproducing said audio data as extracted by said extracting unit, said video data as extracted by said extracting unit and said system data as reconstructed by said data reconstruction unit respectively in an audio data area, a video data area and a system data area, which are separately allocated in a recording medium, in units of a predetermined data amount (e.g. figure 4, column 10, lines 51-61, shows the data structure for data recorded in the magnetic tape, wherein the subcode, video and audio are recorded in the different sectors of the magnetic tape); and

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a combining unit for replacing said audio auxiliary data contained in said audio data by said audio auxiliary data contained in said reconstructed system data when combining said audio data, said video data and said reconstructed system data as reproduced by said recording and reproducing unit (e.g. column 16, lines 29-47 teach the switching circuit 1812 is provided for replacing the PACK having PACK header 801 of "0" and the PACK having the PACK header 801 of "1" in the delay data 1811 in figure 17 with the extracted PACK header having "0" and "1", wherein the PACK 1 including audio auxiliary data);

Kawakami et al teach eliminating unnecessary data in figures 11 C-D, the data structure for recording and the data structure in the DIF, which is for transmission. The DIF block structure in figure 11 D has Dummy data, which is unnecessary for recording and removed in figure 11 C for recording. However, Kawakami et al fail to teach eliminating the unnecessary data **from the extracted data**. The examiner takes official notice for eliminating the unnecessary data from the extracted data. It would have been obvious to one ordinary skill in the art at the time the invention was made to extract data by eliminating unnecessary data due to variations of data structures from transmission to recording and to eliminate the unnecessary data for storage efficiency.

Claim 4 is rejected for the same reason as discussed in claim 1 above.

Regarding claims 2 and 5, Kawakami et al fail to teach an error detecting unit for detecting whether or not an error occurs in the DIF stream. Kawakami et al teach parity byte for data recorded in the storage medium (e.g. figure 11A, and 11C), wherein it is inherent that the parity byte is used for error detection. It would have been have

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been obvious to one ordinary skill in the art at the time the invention was made to have detect error in the DIF stream for transmission accuracy.

Regarding to claims 3 and 6, Kawakami et al teach recording and reproducing unit stores and records said reconstructed system data corresponding to one DIF sequence in said DIF stream in a single recording block of said recording medium corresponding to said predetermined data amount (e.g. the video and audio data recorded in the storage medium in figure 11A corresponds to the data shown in the DIF block in figure 11B).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tanaka et al (US 6,148,136); Koshino et al (US 2001/0026679 A1); Fujinami et al (US 5,940,351); Higurashi et al (US 5,963,703).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daquan Zhao whose telephone number is (571) 270-1119. The examiner can normally be reached on M-Fri. 7:30 -5, alt Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Thai Q, can be reached on (571)272-7382. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Daquan Zhao

A handwritten signature in black ink is written over a rectangular stamp. The signature is stylized and appears to read 'THAI Q TRAN'. The stamp contains the text 'THAI Q TRAN', 'SUPERVISORY PATENT EXAMINER', and 'EBC CENTER 2800'.

Tran Thai Q
Supervisory Patent Examiner